ABSTRACT

The present invention relates to probe cards configured with protective circuitry suitable for use in electrical testing of semiconductor dice without damage to the probe cards. In preferred embodiments of the invention, protective fuses are provided in electrical communication with conductive traces and probe elements (e.g., probe needles) of a probe card. The fuses may be active or passive fuses, and are preferably self-resetting, repairable, and/or replaceable. Typically, the fuses will be interposed in, or located adjacent to, conductive traces residing over a surface of the probe card. In this regard, methods of fabricating a probe card are provided, as well as various probe card configurations. A semiconductor die testing system using the probe card of the present invention is also provided.